

about 10, and wherein m is an integer from 1 to about 20, said pendant portion of said formula is derived from a non-conjugated diene.

### REMARKS

Claims 12-16 and 54-60 are pending in the application and have been rejected. With this amendment Claims 12, 13 and 54 have been amended in order to place the claims in condition for allowance. With this amendment Claims 1-11 and 17-53 were cancelled.

The applicant wishes to thank the Examiner for granting an interview on March 3, 2003 to the applicant's representative, Dan Hudak, Jr. During the interview the following rejections were discussed in reference to the subject application.

Claims 13, 14 and 54-60 have been rejected under 35 U.S.C. § 112 second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. The Examiner states that Claims 13 and 54 are unclear when  $R^8$  is 0. Accordingly, as discussed during the interview, Claims 13 and 54 have been amended to state that  $R^8$  can be nonexistent as disclosed in the application on page 26, line 8. As indicated by the Examiner, when  $R^8$  is nonexistent, the term will be taken to indicate that a single bond connects the two methylene moieties directly to each other rather than to  $R^8$ . Removal of the 35 U.S.C. § 112 second paragraph rejection is earnestly solicited.

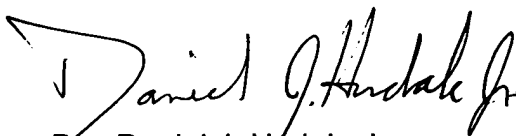
Claims 12, 15 and 16 have been rejected under 35 U.S.C. § 103(a), as being unpatentable over Esso et al (GB Patent No. 1174323). The Examiner states that Esso at page 2, lines 83-85 discloses the use of methylene norbornene which reads upon the claim non-conjugated diene. As can be seen on attached page 1115 from the Aldrich Handbook of Fine Chemicals and Laboratory Equipment 2000-2001 Edition, methylene norbornene (structure 12,984-4) is a cyclic compound which broadly can be considered a diene. As disclosed in the specification on page 25, line 15 through page 26 line 10, the non-conjugated dienes of the present invention are not cyclic, but are instead aliphatic and thus branched or linear. Accordingly, independent Claim 12 has been amended to clarify that the non-conjugated diene is either linear chain or branched chain. Specific support for this claim limitation is found on page 25, line 17 and page

28, line 6. Accordingly, the noted claim limitation excludes methylene norbornene which is taught by the Esso reference. The Esso reference cannot teach or suggest independent Claim 12, especially the non-conjugated diene thereof which is either linear chain or branched chain. Dependent Claim 13 further limits the diene to the specific branched chain diene having the specific disclosed formula.

It is respectfully submitted that the claims are in condition for allowance and a notice of such is earnestly solicited. Should the Examiner have any questions or concerns regarding this response, a telephone call of the undersigned is greatly appreciated in order to expedite allowance of the application.

Respectfully submitted,

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A handwritten signature in black ink, appearing to read "Daniel J. Hudak, Jr.", written in a cursive style.

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Enclosure: pg 1115 from the Aldrich Handbook of Fine Chemicals and Laboratory Equipment 2000-2001 Edition



# Aldrich

Handbook of Fine Chemicals and Laboratory Equipment

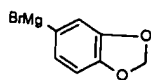


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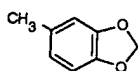
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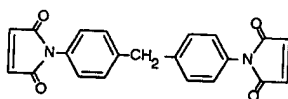
51,293-1	3,4-(Methylenedioxy)phenylmagnesium bromide, 1.0M solution in toluene/tetrahydrofuran (50:50) [17680-04-5] FW 225.34 d 1.040 Fp 14°F(-10°C) FLAMMABLE LIQUID CORROSIVE	100mL	\$ 60.90
3,4-(Methylenedioxy)phenylmethanol	see P4,940-6, Piperonyl alcohol page 1335		
1,2-(Methylenedioxy)-4-propenylbenzene	see 29,180-3, Isosafrole page 995		
28,454-8	3,4-(Methylenedioxy)toluene, 97% [7145-99-5] (5-methyl-1,3-benzodioxole) ..... mp 136.15 bp 199-200° n <sub>D</sub> 1.5320 d 1.135 Fp 169°F(76°C) Beil. 19(1),614 FT-NMR 1(2),231B Safety 2,2347A R&S 1(1),1257E	25mL	45.40
	Methylenediphenol, see Bis(hydroxyphenyl)methane		
22,746-3	1,1'-(Methylenedi-4,1-phenylene)bismaleimide, 95% [13676-54-5] ..... (Bismaleimide) FW 358.36 mp 156-158° Beil. 21(3),4641 Safety 2,2347B R&S 1(2),2077J RTECS# ON5670000 IRRITANT	25g 100g	18.80 51.40
23,395-1	Methylenediphosphonic acid, 98% [1984-15-2] CH <sub>2</sub> P(O)(OH) <sub>2</sub> FW 176.00 ..... mp 197-199° Beil. 1(4),3071 Merck Index 12,5837 FT-NMR 1(1),1475A FT-IR 1(1),915A R&S 1(1),1101F CORROSIVE	250mg 1g	19.60 61.80
	Contains ~1% ethyl alcohol and <0.5% methyl alcohol		
27,429-1	Methylenediphosphonic acid, trisodium salt tetrahydrate, 98% ..... HOP(O)(ONa)CH <sub>2</sub> P(O)(ONa) <sub>2</sub> ·4H <sub>2</sub> O FW 314.01 Safety 2,2347C R&S 1(1),1101G HYGROSCOPIC	250mg 1g	23.90 74.80
	1,1'-Methylenedipiperidine, see 17,020-8, Dipiperidinomethane page 705		
10,509-0	Methylene dithiocyanate, 97% [6317-18-6] CH <sub>2</sub> (SCN) <sub>2</sub> FW 130.19 mp 104-106° Beil. 3,179 FT-NMR 1(1),1409A Safety 2,2347D R&S 1(1),1029C RTECS# XL1560000 LACHRYMATOR TOXIC	25g	43.40
12,554-7	2-Methyleneglutaronitrile, 99% [1572-52-7] NCCH <sub>2</sub> CH <sub>2</sub> C(=CH <sub>2</sub> )CN FW 106.13 ..... mp -9.6° bp 254° n <sub>D</sub> 1.4560 d 0.976 Fp >230°F(110°C) FT-NMR 1(1),1361B FT-IR 1(1),844D Safety 2,2348A R&S 1(1),993D	5g	25.70
21,110-9	Methylene Green, zinc chloride double salt [6722-15-2] (Basic Green 5, C.I. 52020) FW 433.00 λ <sub>max</sub> 657(618)nm Beil. 27,399 FT-IR 1(2),1038D R&S 1(2),2815M UV-Vis 451 RTECS# SP5775000 Dye content ~65%	25g	18.40
	Methylene iodide, see 15,842-9, Diiodomethane page 615		
14,605-5	3-Methylene-2-norbornanone, 97% [5597-27-3] FW 122.17 bp 69-71°/11mm ..... n <sub>D</sub> 1.4930 d 0.997 Fp 131°F(55°C) FT-NMR 1(1),698C FT-IR 1(1),449D Safety 2,2348D R&S 1(1),483N	5g 25g	58.40 233.60
12,984-4	5-Methylene-2-norbornene, tech., 90% [694-91-7] FW 106.17 n <sub>D</sub> 1.4830 d 0.981 ..... Fp 40°F(4°C) FT-NMR 1(1),79A FT-IR 1(1),51B Safety 2,2349A R&S 1(1),49G FLAMMABLE LIQUID	25g 100g	48.10 131.40
	4,5-Methylenepheneanthrene, see 26,142-4, 4H-Cyclopenta[def]phenanthrene page 480		
33,951-2	2-Methylene-1,3-propanediol, 97% [3513-81-3] HOCH <sub>2</sub> C(=CH <sub>2</sub> )CH <sub>2</sub> OH FW 88.11 ..... bp 93-95°/2mm n <sub>D</sub> 1.4750 d 1.081 Fp >230°F(110°C) Beil. 1(4),2663 Fieser 6,379 FT-NMR 1(1),220C R&S 1(1),1510 IRRITANT	1g 5g	23.20 76.20
13,409-4	(2-Methylene-1,3-propanediyl)bis(trichlorosilane), 98% [78948-04-6] ..... H <sub>2</sub> C=C(CH <sub>2</sub> SiCl <sub>3</sub> ) <sub>2</sub> FW 322.98 bp 128-131°/16mm n <sub>D</sub> 1.4880 d 1.400 Fp 178°F(81°C) CORROSIVE MOISTURE-SENSITIVE	1g 10g	15.90 88.00
14,612-8	2-Methylene-3-quinuclidinone hydrochloride hydrate, 97% FW 173.66 ..... mp 263°(dec.) FT-NMR 1(1),592C FT-IR 1(1),462C R&S 1(1),399D IRRITANT	1g 5g	16.20 53.70
	Methylenesuccinic acid, see I-2,920-4, Itaconic acid page 996		
	2-Methylenesuccinic anhydride, see 25,992-6, Itaconic anhydride page 996		
	Methylenesuccinic chloride, see I-2,930-1, Itaconyl chloride page 996		



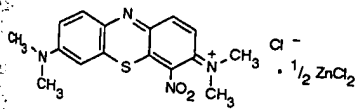
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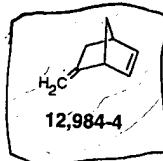
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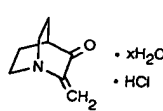
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M4,605-5



12,984-4



M4,612-8